

REMARKS

The Examiner has rejected claims 5, 6 and 10 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter. Claims 5, 6 and 10 have been amended and are believed to overcome the rejection under 35 U.S.C. §112.

The Examiner has rejected claims 1 – 3 and 7 – 9 under 35 U.S.C. §102(b) as being anticipated by Kusz (U.S. 5,687,863) and has rejected claims 1-4, 7 – 9 and 11 under 35 U.S.C. §103(a) as being unpatentable over Robinson (U.S. 5,915,576) in view of Kusz (U.S. 5,687,863). Independent claims 1, 7 and 12 have been amended and, with such amendments, are believed to patentably distinguish over the reference to Kusz and over the combination of the references to Robinson and Kusz.

Submitted herewith is a Declaration of the inventor, Philip J. Robinson. As noted in Mr. Robinson's Declaration, the present patent application is commonly owned by the same assignee as both the Kusz and Robinson references, namely, Owens Illinois Closure Inc. Mr. Robinson is the inventor of the Robinson '576 patent and is intimately familiar with it and with the closure disclosed in the Kusz patent.

As set forth in the Declaration of Mr. Robinson, despite significant technical efforts, the closure as described in the Kusz patent and the child resistant package

of which it is an integral component, have not been successfully manufactured on a commercial basis as a result of certain technical problems. As pointed out in Mr. Robinson's Declaration, the thinness of the chordal lugs 70 of the closure 24 of Kusz has presented problems in molding the closures on a commercial basis as it is difficult to completely fill the molding cavity in which such lugs 70 are formed. In molding such closure 24 of Kusz, the plastic material is injected into the molding cavity at the center of the top panel or base wall 26 and is required to flow along the cavity defining such base wall 26 and then into the cavity portions defining the juncture between such base wall 26 and the peripheral wall or skirt 28.

Additionally, the lugs 64 of the closure of Kusz require what may be termed as "bar-like" rigidity. In order to obtain such rigidity, the closure of Kusz requires the use of position ramps which are referred to as projections 56 (see Figs. 7 and 8 of Kusz). The use in Kusz of such position ramp projections with their chordal surfaces 58 are required as, if not used, the lug 70 will begin to flex prematurely with potential failure and severe deformation. It should be noted that claims 7 and 12 have been amended to clearly specify that the ramp shaped locking lugs of the container have a "... radially extending side extending from a radially outermost exterior inwardly to meet said neck outer surface ..." (See claim 7, lines 7 and 8.) and "... extending directly from said outer surface of said neck ..." (See claim 12, lines 8 and 9).

Claim 1 has been amended to set forth that the locking lugs are “ ... adjacent said free end ...” Claim 7 has similarly been amended. It should be noted that the cordal lugs 70 of Kusz have 2 hinged areas, namely, a vertical hinge area 72 along the skirt and a horizontal hinge area 74 at its upper end on the inside surface of the top panel or base wall 26. In contrast and as clearly set forth in the amendments to claims 1 and 7, the locking lugs of the closure, with the U-shaped recess or indentation are positioned adjacent the lower free end of the skirt. This clearly distinguishes from the lug 70 of the Kusz reference in which the locking lug extends to and is integral with the inner surface of the top panel to provide the horizontal hinge area 74.

The closure of Kusz additionally requires a large wall arc in order to operate properly. If the Kusz closure is first turned and then squeezed, the lug 70 of the closure will lock up against the axial surface 54 of the abutment 52 and will not operate properly.

Other difficulties which have been encountered in the manufacture of the Kusz closure is the increase in fill time needed for injecting molding due to the thin cross section of the lug 70 and the difficulty in getting the mold cavity for such thin lug 70 completely filled. Additionally, in molding the lug 70 of Kusz, a thin sliver of steel is required to form the back side of the lug. This has resulted in increase cost of maintenance. The fact that the closure has an oval cross-sectional

configuration presents problems due to shrinkage relative to cordal length in association with the outer wall and inside top.

With respect to the closure of Robinson, U.S. 5,915,576, it utilizes axially extending CR lugs 46 and 48 which project radially inwardly into the annular space between the inner and outer skirts 28 and 30. The locking lugs 46 and 48 are different from the locking lugs 20 disclosed in the present application and defined in claims 1 and 7 in that the locking lugs 46 and 48 of Robinson do not have a U-shaped configuration such as that set forth as element 20B of the present application and in that the locking lugs of 46 and 48 of Robinson extend axially of the skirt "... essentially its entire interior length and their upper ends integrally adjoin the underside surface of an annular peripheral portion 50 of base wall 26..." (see column 4, lines 58 – 60 of Robinson).

It is respectfully submitted that the claims as presently amended clearly and patentable distinguish over the combination of Kusz and Robinson. It would be unobvious to a person skilled in the art and having knowledge of such references to conceive the closure and the package as defined in the present claims.


The reference to Gargione (U.S. 5,706,963) was applied only with reference to claims 5 and 6 dependent upon claim 1. Gargione has no relevance other than the feature of showing an outward taper for the skirt. Given the allowability of claim 1, it is believed that claims 5 and 6 also are allowable.

The reference to Thorncock et al. (U.S. 4,948,002) is cited only in reference to claim 10 which is dependent, indirectly, upon claim 7. Assuming the Examiner agrees that claim 7 is patentable, claim 10 dependent thereon is also patentable.

In view of the foregoing, reconsideration of the application and allowance of claims 1 – 13 are respectfully solicited.

Respectfully submitted,

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